

1. Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

List of Claims:

1. (Currently Amended) A combination of a microphone requiring a bias signal and ~~analog-to-digital sigma-delta converter operable to supply a bias signal to the microphone and~~ having an input connected to an output of the microphone, to convert a signal generated by the microphone into a digital signal at an output of the ~~analog-to-digital sigma-delta converter, wherein the sigma-delta converter comprises:~~

~~a loop filter, a sampler, a first feed-back circuit for AC signal, including a first digital-to-analog converter, and a second feedback circuit for DC signals, including a second digital-to-analog converter, the bias signal for the microphone being derived from the second feed-back circuit, and the first and the second feedback circuit both being coupled to an input of the loop filter characterized in that the analog-to-digital converter is operable to supply a bias signal to the microphone.~~

2. (Cancelled).

3. (Currently Amended) A combination as claimed in claim [[2]], characterized in that ~~wherein~~ the second feed-back circuit includes a low pass filter having a cut-off frequency lower than the lowest signal frequency of the analog-to-digital converter.

4. (Currently Amended) A combination as claimed in claim [[2]], characterized in that ~~wherein~~ the gain of the second feed-back loop, which comprises the loop filter, the sampler and the second feed-back circuit, is several orders of magnitude higher than

unity.

5. (Currently Amended) A combination as claimed in claim 3, characterized in that wherein the low pass filter is a digital filter and is included in the second feed-back circuit before the second digital-to-analog converter.

6. (Currently Amended) A combination as claimed in claim 5, characterized in that wherein the first and the second feed-back circuit are combined to a united feed-back circuit including a single digital-to-analog converter, having an input connected to a low-pass filter, and a bypass circuit which bypasses the low-pass filter.

7. (Currently Amended) A combination as claimed in claim [[2]], characterized in that wherein the first integrator comprises a bridge circuit, whose branches include current sources, which bridge circuit has a first pair of opposite junctions is connected to a power supply, and has a second pair of opposite junctions is connected to one another by a capacitor and the microphone, the junctions of said second pair each being connected to the inputs of the sampler circuit, and a pair of opposite current sources being controlled by the output signal of the feedback circuit.

8. (Currently Amended) A combination as claimed in claim 7, characterized in that wherein the integrator comprises a common mode amplifier having an output for driving control inputs of controllable current sources connected between the inputs of the sampler circuit and one of the power supply lines.

9. (New) A microphone, comprising:

an analog-to-digital converter (ADC) having an input connected to an output of the microphone, wherein the ADC converter converts a signal generated by the microphone into a digital signal at an output of the ADC and supplies a bias signal to the microphone.